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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/637,442	08/11/2000	Shannon Lee Korson	13DV13511	7955
29399	7590	10/03/2005	EXAMINER	
JOHN S. BEULICK C/O ARMSTRONG TEASDALE LLP ONE METROPOLITAN SQUARE SUITE 2600 ST. LOUIS, MO 63102-2740			PHAM, KHANH B	
			ART UNIT	PAPER NUMBER
			2167	
DATE MAILED: 10/03/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/637,442

Applicant(s)

KORSON ET AL.

Examiner

Khanh B. Pham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,5 and 8-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5 and 8-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

AT

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.
2. Applicant's submission filed on July 18, 2005 has been entered. Claims 1, 5 have been amended. Claim 2 has been canceled. Claims 1, 5, 8-19 are pending in this Office Action.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. **Claims 1-2, 5, 8-19 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Jiang (US 6,278,913 B1), hereinafter "**Jiang**", and in view of Dahlberg (US 6,463,439 B1), hereinafter "**Dahlberg**".

**As per claim 1**, Jiang teaches a method of exporting data from an engine condition monitoring program database to a long term storage destination database (See Fig. 1), said method comprising:

- "downloading data recorded in a flight data recorder to a program database retaining only recent data in a ground-based computer system (i.e., "Ground Station", Fig. 1, layer 4) having an engine monitoring program using said program database for storage and analysis" at Col. 4 lines 54-67 and Col. 5 lines 55-67;
- "extracting data from said program database, wherein said data comprises engine configuration data, aircraft configuration data, engine input data, engine raw output data, engine smoothed output data, aircraft input data, aircraft raw output data, aircraft smoothed output data, alert data, initialization data and compressed data" at Col. 4 lines 54-67 and Figs. 12a-12b;
- "wherein said extracted data includes re-alerted and backdated data" at Figs 8(b) to 8(d)

- “exporting said extracted data to said long term storage destination database (i.e., “Flight Management Center Database”, Fig. 1, layer 5)” at Col. 6 lines 1-13;

Jiang does not teach the step of: “after a successful export, updating an external time file with the date and time of said successful export”. However, Dahlberg teaches a method for incremental extracting data from a database (Col. 5 lines 47-55) utilizing time stamps to indicate the time of the last full extract at Col. 6 lines 55-60. As noted by Dahlbert, the time stamps help “reduce the time spent extracting data from the database. Instead of extracting the whole table, only information that has changed since the last full extraction is extracted” at Col. 5 lines 47-52. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Dahlberg and Jiang's teachings by adding the time stamps after a successful export as suggested by Dahlberg to Jiang's method in order to reduce the time and resource required for the next data extraction, because only changed and added data identified using the time stamps are exported.

**As per claim 5**, Jiang teaches in a computer system having an engine condition monitoring program (Fig. 1, layer 1) , a program database (Fig. 1, layer 4) comprising a number of data tables and a long term storage destination database (Fig. 1, layer 5), a method of exporting data from said program database to said destination database comprising:

- “downloading data recorded in a flight data recorder to said program database for short term storage and analysis” at Col. 5 lines 53-67;

- “retrieving data found in searching said program database, wherein said data comprises engine configuration data, aircraft configuration data, engine input data, engine raw output data, engine smoothed output data, aircraft input data, aircraft raw output data, aircraft smoothed output data, alert data, initialization data and compressed data” at Col. 4 lines 54-67 and Figs. 12a-12b;
- “wherein said extracted data includes re-alerted and backdated data” at Figs 8(c) and 8(d)
- “exporting said retrieved data to said long term storage destination database” at Col. 6 lines 1-13;

Jiang does not teach the steps of: “reading an external time file to determine the last date and time that data was successfully exported to said destination database; after a successful export, searching said program database for data that is new or changed since said last successful export; updating an external time file with the date and time of said successful export”. However, Dahlberg teaches a method for incremental extracting data from a database (Col. 5 lines 47-55) utilizing time stamps to indicate the time of the last full extract at Col. 6 lines 55-60. As noted by Dahlbert, the time stamps help “reduce the time spent extracting data from the database. Instead of extracting the whole table, only information that has changed since the last full extraction is extracted” at Col. 5 lines 47-52. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Dahlberg and Jiang’s teachings by adding the time stamps after a successful export and the step of searching database for changed or added data based on the time stamps as suggested

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by Dahlberg to Jiang's method in order to reduce the time and resource required for data extraction, because only changed and added data identified using the time stamps are exported.

**As per claim 8**, Jiang and Dahlberg teach the method of claim 5 as discussed above. Jiang also teaches: "wherein said program database includes a flight data table, and a number of engine data tables and aircraft data tables and said step of searching said program database comprises searching said flight data table for flight data that is new or modified since said last successful export" at Col. 4 lines 54-67 and Figs. 12a-12b.

**As per claim 9**, Jiang and Dahlberg teach the method of claim 8 as discussed above. Jiang also teaches: "retrieving data comprises retrieving data from said engine data tables and said flight data tables for each flight data record found in said flight data table" Col. 4 lines 54-67 and Figs. 12a-12b.

**As per claim 10**, Jiang and Dahlberg teach the method of claim 9 as discussed above. Dahlberg also teaches "providing each of said engine data tables and said aircraft engine tables with an indication that data retrieval is completed after said flight data is retrieved from each table" at Col. 5 lines 3-10.

**As per claim 11**, Jiang and Dahlberg teach the method of claim 5 as discussed above. Dahlberg also teaches: "said program database includes a process indicator table" at Col. 5 lines 3-10, and "a number of engine data tables and aircraft data tables and said step of searching said program database comprises searching said process

indicator table for reprocessed flight data that is changed since said last successful export” at Col. 5 lines 47-66.

**As per claim 12**, Jiang and Dahlberg teach the method of claim 11 as discussed above. Jiang also teaches: “said step of retrieving data comprises retrieving data from said engine data tables and said aircraft data tables for each reprocessed flight data record found in said process indicator table” at Col. 4 lines 54-67 and Figs. 12a-12b.

**As per claim 13**, Jiang and Dahlberg teach the method of claim 12 as discussed above. Dahlberg further teaches: “providing each of said engine data tables and said aircraft engine tables with an indication that data retrieval is completed after said reprocessed flight data is retrieved from each table” at Col. 5 lines 3-11.

**As per claim 14**, Jiang and Dahlberg teach the method of claim 5 as discussed above. Dahlberg also teaches: “said program database includes an initialization data table, and said step of searching said program database comprises searching said initialization data table for initialization data that is changed since said last successful export” at Col. 5 lines 48-66.

**As per claim 15**, Jiang and Dahlberg teach the method of claim 14 as discussed above. Dahlberg also teaches: “wherein said step of retrieving data comprises retrieving initialization data found in said initialization data table” at Col. 9 lines 25-35.

**As per claim 16**, Jiang and Dahlberg teach the method of claim 15 as discussed above. Dahlberg also teaches: “providing said initialization data table with an indication that data retrieval is completed after said initialization data is retrieved from said initialization table” at Col. 5 lines 3-11.



**As per claim 17**, Jiang and Dahlberg teach the method of claim 5 as discussed above. Jiang further teaches: "said program database includes a compression data table" at Col. 5 lines 40-50. Dahlberg also teaches: "said searching said program database comprises searching said compression data table for compression data that is changed since said last successful export" at Col. 9 lines 25-35.

**As per claim 18**, Jiang and Dahlberg teach the method of claim 17 as discussed above. Dahlberg also teaches: "said step of retrieving data comprises retrieving compression data found in said compression data table" at Col. 9 lines 25-35.

**As per claim 19**, Jiang and Dahlberg teach the method of claim 18 as discussed above. Dahlberg further teaches: "providing said compression data table with an indication that data retrieval is completed after said compression data is retrieved from said compression table" at Col. 5 lines 3-11.

### ***Response to Arguments***

6. Applicant's arguments filed July 18, 2005 have been fully considered but they are not persuasive. The examiner respectfully traverses applicant's arguments.

Applicant argued that Jiang and Dahlberg do not teach or suggest "extracted data includes re-alerted and backdated data" as claimed. The examiner respectfully submits that the meanings of the phrase "re-alerted and backdated data" are not clearly defined in the specification. The text portion applicant pointed out in the remark (i.e., page 3 lines 25 to page 4, line 3) does not disclose any information regarding "re-alerting and backed data". The examiner therefore relied on the teaching at page 8, which states:

"The searches of the various database tables will also retrieved re-smoothed, re-alerted and backdated data. That is if a data record that had previously been exported to the destination database 24 is subsequently changed in the program database 20, then the extractor program 22 will update this data record in the destination database 24"

In light of the above text portion, "re-alerted and backdated data" means updating previously exported data with newly changed data. Jiang teaches at Fig. 8(b)-8(d) the steps of comparing previous data with present data to identify change and update the data. Jiang therefore teaches the claimed limitation.

In light of the foregoing arguments, the 35 U.S.C 103 rejection is hereby sustained.

### ***Conclusion***

7. The prior art made of record, listed on form PTO-892, and not relied upon, if any, is considered pertinent to applicant's disclosure.

If a reference indicated as being mailed on PTO-FORM 892 has not been enclosed in this action, please contact Lisa Craney whose telephone number is (571) 272-3574 for faster service.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh B. Pham whose telephone number is (571) 272-

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4116. The examiner can normally be reached on Monday through Friday 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Khanh B. Pham  
Examiner  
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KBP  
September 22, 2005

